SPECIFICATIONS: FLUXERGY REACTION MIX

EQUINE HERPESVIRUS 1

Background: Equine herpesvirus 1 (EHV-1) is a common and burdensome DNA virus in horse populations globally. It is highly contagious and spreads through direct horse-to-horse contact or indirect contact e.g. contaminated hands, equipment. Moreover, the neurologic form of the disease is particularly troublesome due to associated degrees of paralysis and is seen in approximately 10% of infected horses. Current diagnostic testing requires use of PCR for specific diagnosis as clinical signs of EHV-1 mimic that of equine influenza, EHV-4 and other respiratory pathogens. EHV-1 imposes further risk due to potentially neuropathic disease thus providing the necessity for species discrimination during diagnosis.

- Reduce Central Lab Fees and Logistics
- Get Fast, Accurate Results that can Improve Decision Making
- Stall-side care
- Minimal hands-on time per sample

Reaction Mix Specifications	
Test Type	PCR, Direct PCR
Time to Result	~60 minutes
Sample Preparation	~3 min from reagent thaw, No extraction required
Sample Type	NPS in 3mL VTM See accepted VTMs *
Required Sample Volume	42µL
Gene Target	gB nd gD
Storage	-10° – -30°C
Format	10 vials, 100 vials, Bulk Plate Reagents
Reader Compatibility	High Throughput thermocycler, Fluxergy Analyzer
Cartridge Compatibility	8 well strip, PCR plate, Fluxergy Card

Fluxergy Inc., 30 Fairbanks, Irvine, California 92618, +1(949) 305-4201, info@fluxergy.com;
Fluxergy Europe GmbH, Kreuzäcker Ring 23 D-63814 Mainaschaff, Germany, +49 6043 403518

ASSAY PERFORMANCE

EQUINE HERPESVIRUS 1

Download more here!

LOD

The LoD of the Fluxergy Assay PCR EHV-1 Test was performed with enumerated *Equine herpesvirus 1 virus* USDA strain (# 045-EDV). The virus stock was serially diluted to 0.028 copies/µL within pooled negative equine nasal swab matrix. Third LoD confirmation was tested at 1000 copies/mL with 20/20 tested **(LoD of 1000 copies/mL).**

Method Comparison

The study design will test the ability of the Fluxergy PCR EHV-1 Assay to detect contrived, near LoD samples in individually collected equine nasal swab matrix samples. The nasal swab samples will be collected and confirmed as as negatives by PCR (Validated commercial S. equi Test). Contrived samples included the following concentrations: 2x LoD and above with Equine herpesvirus 1 virus USDA strain (# 045-EDV). Native (Negative) and contrived (Positive) samples will be tested with Fluxergy Assay PCR EHV-1 Test.

Interference Testing

The following potentially interfering substances from equine upper respiratory system were tested for assay interference using samples containing EHV1 045-EDV strain at 3x LoD. Testing was performed in triplicate at the indicted levels. No interference was observed (Table below).

Interfering Agent	Concentration	Cards Detected
Flunixin meglumine	10 mcg/mL	3/3
Phenylbutazone	5 mcg/mL	3/3
Guaiacol Glycerol Ether	4 ng/mL	3/3
L-Menthol	0.5mg/mL	3/3
Trimethoprim	2.0 mcg/mL	3/3
Metronidazole	20 mcg/mL	3/3
Enrofloxacin	10 mcg/mL	3/3
Horse Blood	5% (v/v)	3/3
Horse Blood	2% (v/v)	3/3
Horse Blood	1% (v/v)	3/3
DMSO	0.2% (v/v)	3/3
Methanol	5% (v/v)	3/3